Work Order ID 57136

March 23, 2010 1:13:14 PM



Page 1

Item ID:

D205-634-041

Accept

Setup Start

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

23/03/2010

Start Qty: 1.00

Required Date: 09/04/2010

Req'd Qty: 1.00

Cust Item ID: Customer:

Reference:

Approvals:

Process Plan:

QC:

Date:

Date 10-3-23 Tooling:

SPC (Y/N):

Date:

Date:

Run

Accept

Qty

Start

Stop



Sequence ID/ Work Center ID

Operation Description

Set Up/

Run Hours

Draw Number Draw Plan Rev. Code

Reject Qty

Reject Insp. Number

Stamp

Draw Nbr

Revision Nbr

D2580

Rev D

Document Control

DOCUMENT CONTROL

Memo

0.00

0.00

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

110

CNC Delta 100 Bender

BENDING MACHINE - SKIDTUBES

Memo

0.00

0.00

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

10-03-30

Dart Ae	rospace	Ltd			域			
W/O:		N. Committee	WC	RK ORDER CHANGES			3	-
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date Qt	y Approval Chief Eng / Prod Mgr	Approvi
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Part No		PAR #:		gory: N				
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		Description of NC		Corrective Action Section B	3	Varification		
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Work Order ID 57136

March 23, 2010 1:13:14 PM



Page 2

Item ID:

D205-634-041

Revision ID:

Item Name:

Replacement Skidtube

Start Date:

23/03/2010

Required Date: 09/04/2010

Start Qty: 1.00 Req'd Qty: 1.00



Accept



Setup Start



Stop

Reference:

Approvals:

Process Plan:

Tooling:

0.00

Date:

Cust Item ID:

Customer:

Start



QC:

Date: Date:

SPC (Y/N):

Date:

Rev.

Stop

Sequence ID/ Work Center ID

120

Skidtubes Skidtubes

Operation Description

Set Up/

Run Hours 0.00

Draw Number Draw Plan Code

Accept Qty

Reject Qty

Run

Reject Insp. Number Stamp

Memo

Memo

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

BE 10/03/30

130

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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	9.			, \
NCR: Yes	No DQ	A:	Date: _	
QA: N/C C	Closed:		Date:	
Š	QA: N/C		QA: N/C Closed:	QA: N/C Closed: Date: _

NCR:		W	ORK ORD	ER NON-CONFORMAN	CE (NCR)			
		Description of NC		Corrective Action Section B				
DATE ST	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
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	No.				279			

Work Order ID 57136

March 23, 2010 1:13:14 PM



Page 3

Item ID: D205-634-041

Revision ID:

Item Name: Replacement Skidtube

QC:

Start Date: 23/03/2010 Start Qty: 1.00 Required Date: 09/04/2010 Req'd Qty: 1.00

Reference:

Approvals:





Setup Start

Stop



Process Plan:

Date: Date: Tooling:

Accept

SPC (Y/N):

Date:

Cust Item ID:

Customer:

Date:

Run Start

Stop



Sequence ID/ Work Center ID

140

Skidtubes

Skidtubes

Operation Description

Set Up/ Run Hours 0.00

Draw Number

Draw Plan Rev. Code

Accept Qty

Reject Qty

Reject Number

Insp. Stamp

Memo

0.00

1-Weld step D2576 as per Dwg. D2580 and QSI 004 A/R . Aluminum Rod

BE 10/03/30

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill A/R | Aluminum Rod | Alumin

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web.Deburr

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580. Deburr holes

6-Drill pilot holes for aft cap using DT 8215Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

BE 10/04/06

Dart Aerospac	ce Ltd	
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W/O									7
W/O:			W	ORK ORDER CHANGE	S				
DATE	STEP	PROC	CEDURE CHANGE By Date Qu			Qty Approval Chief Eng / Prod Mgr Approv			
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Part No		PAR #:							
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NCR:				DER NON-CONFORMAN					
DATE STEP		Description of NC		Corrective Action Section		Verificat	ion	Approval	Approval
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Work Order ID 57136

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Page 4

Item ID:

D205-634-041

Accept

Revision ID:

Item Name:

Replacement Skidtube

Start Date:

23/03/2010

Start Qty: 1.00 Required Date: 09/04/2010

Req'd Qty: 1.00



Cust Item ID:

Customer:

Draw

Number



Reference:

Approvals:

Process Plan:

Date: Date:

Tooling:

SPC (Y/N):

Date: Date:

Draw

Rev.

Start

Stop

Setup Start

Stop



QC:

Sequence ID/ Work Center ID

Quality Control

Operation Description

QC10- Inspect visual per QSI004- ground welds

Memo

Set Up/ Run Hours

0.00

0.00

Plan

Code

Accept Reject Qty

Run

Reject Number

Insp. Stamp

160

Quality Control

QC5- Inspect part completeness to step on W/O

0.00 0.00

Qty

170

HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

Memo

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd $\frac{1}{1000}$ $\frac{1}{1000}$ cap out of solution.

Dart Aerospace Ltd W/O: WORK ORDER CHANGES DATE STEP PROCEDURE CHANGE By Date Oty Approval Chief Eng / Prod Mgr OC Inspector

Part No:	PAR #:	Fault Category:	NCR: Yes No DQA:	Date:
Resol	ution:	Disposition:	QA: N/C Closed:	Date:

NCR:		W	ORK OR	DER NON-CONFORMANO	E (NCR)			
		Description of NC		Corrective Action Section B				
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
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Work Order ID 57136

March 23, 2010 1:13:14 PM



Page 5

Item ID: Revision ID:

D205-634-041

Accept

Setup Start

Stop



Start Date:

Item Name:

23/03/2010 Required Date: 09/04/2010

Replacement Skidtube

Start Qty: 1.00 Req'd Qty: 1.00

Cust Item ID: Customer:



Reference:

Tooling:

Date:

Start

Run



Approvals: QC:

Process Plan:

Date: Date:

SPC (Y/N):

Set Up/

Run Hours

Date:

Draw

Plan

Code

Stop

Reject

Qty

Sequence ID/ Work Center ID

180

Powdercoat

Powder Coating

Operation Description

White Gloss(Ref.4.3.5.1) per QS1005 4.3-Alum

0.00

9:00Am

0.00 =) -

Number Rev.

Draw

10/04/07

Qty

Accept

Number Stamp

Reject

190

Quality Control

QC3- Inspect Part Finish

Memo

Memo

START TIME: OVEN TEMPERATURE: FINISH TIME:

0.00

0.00

BR 10-4-7

Dart Aerospace Ltd W/O: WORK ORDER CHANGES Approval DATE STEP Approval PROCEDURE CHANGE Bv Qty Date Chief Eng / QC Inspector Prod Mar Part No: PAR #: Fault Category: ______ NCR: Yes No DQA: _ Date: Disposition: QA: N/C Closed: Resolution: Date: WORK ORDER NON-CONFORMANCE (NCR) NCR: **Corrective Action** Section B **Description of NC** Verification DATE STEP Approval Approval Initial **Action Description** Sign & Section A Section C QC Inspector Chief Eng Chief Eng Chief Eng Date

Work Order ID 57136

March 23, 2010 1:13:14 PM



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Item ID:

D205-634-041

Revision ID:

Item Name:

Replacement Skidtube

Start Date:

23/03/2010

Start Qty: 1.00

Required Date: 09/04/2010

Req'd Qty: 1.00



Accept



Setup Start

Stop



Reference:

Approvals:

Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Customer:

Cust Item ID:

Run

Stop

Start



Sequence ID/ Work Center ID

200



Hand Finishing

Operation Description

Set Up/ Run Hours

Draw Number

Draw Plan Rev. Code

Accept Qty

Reject Qty

Reject Number

Stamp

Memo

0.00

0.00

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates

A/R DDD Sikaflex-291

Sikaflex expire date:

2-Coat D2594-3 O'rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with

Sikaflex. Clean excess adhesive A/R Sikaflex-291 / 112427

Sikaflex expire date: 1008

5-Wing Walk as per Dwg D2580 and QSI 005 4.4 Batch:

\$\$ 10-4-7 O.

Dart Aerospa	ace Ltd
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W/O:			WORK ORDER CHANGES							
DATE	STEP	PRO	CEDURE CH	CHANGE By Date Q			Qty	Approval Chief Eng / Prod Mgr Approva QC Inspector		
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Part No		PAR #:								
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NCR:		W	ORK ORD	ER NON-CONFORMA	NCE (NCR)				
DATE STEP		Description of NC	Corrective Action		Section B Ve		tion	Approval	Approval	
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector	

Work Order ID 57136

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Item ID:

D205-634-041

Accept

Setup Start

Revision ID:

Item Name: Replacement Skidtube

Required Date: 09/04/2010

23/03/2010

Start Qty: 1.00 Req'd Qty: 1.00

Cust Item ID: Customer:

Stop

Reference:

Start Date:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Draw

Rev.

Start

Insp.

Stamp

QC:

Date:

SPC (Y/N):

Date:

Stop

Reject

Qty

Run

Reject

Number

Sequence ID/ Work Center ID

210

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

Foreign objects per QSI 024

Set Up/ Run Hours

0.00

0.00

0.00

Number

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for

Draw

Plan

Code

Accept

Qty

220

Packaging Packaging

Packaging

Memo

Memo

0.00

Identify and pack for shipping as per PPPD205-634-041 Location:

PPP Rev:

230

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

PDP 57/37 (Ene/9/3) 10/04/12/9 MF 10-4-9

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W/O:			WC	ORK ORDER CHANG	ES		To 2	عادا		191	
DATE	STEP	PROCEDURE CHANGE By Date C					Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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NCR:		W	ORK ORD	ER NON-CONFORMA	NCE (N	ICR)				1 12	
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March 23, 2010 1:13:18 PM

Work Order ID: 57136

Parent Item: D205-634-041

Parent Item Name: Replacement Skidtube

Comments: IPP Rev:N \Box 02.08.28 \Box FP was QC5 in Step 27; Added QC5 to Step 30 \Box KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 23/03/2010

Start Qty: 1.00

Required Date: 09/04/2010

Page 1

Required Qty: 1.00

D2580-1

Manufactured

Manufactured

110

Each

Each

2.0000

1.0000

205 Skidtube bent detail

Warehouse

Location

Main Warehouse

LG

54541

Loc Qty

140

Loc Code

124.0000 1.0000

D2576-3

Step (maching detail)

Warehouse

Loc Qty

124

Loc Code

Location

Main Warehouse LG

46661 77 52215 47

1 BE 10/03/30

Dart Aer	ospace Lt	(
w/o·		

W/O:			W	ORK ORDER CHANG	ES				
DATE STEP		PROC	EDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No		PAR #:							
	Re	esolution:						Date:	
NCR:		Wo	ORK ORE	DER NON-CONFORMA	NCE (NCR)			1
DATE	STEP	Description of NC		Corrective Action Section	(0)(0000	Verifica	tion	Approval	Approval
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March 23, 2010 1:13:18 PM

Page 2

Required Date: 09/04/2010

Required Qty: 1.00

Work Order ID: 57136

Parent Item:

D205-634-041

Parent Item Name: Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

Manufactured

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

54543

56715 56818 140

Each

175.0000 20.0000

Start Date: 23/03/2010

Start Qty: 1.00

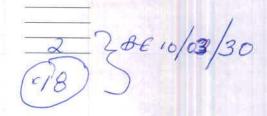
Crossbolt Spacer

D2579

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
LG	175	
43988	4	
46434	4	
46956	2	
47797	9	
48272	2	
51314	71	
51315	30	
51525	4	
53780	3	

3 57052

18



Dart Aerospace Ltd

W/O:			WC	RK ORDER CHAN	GES					
DATE STEP		PRO	CEDURE CHA	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	rt No: PAR #: Fault Category: NCR: Yes No									
	Resolution: Disposition: O							_ Date: _		
NCR:		V	VORK ORDI	ER NON-CONFORM	IANCE	(NCR)			
DATE	DATE STEP Description of NC		Corrective Action Section B			Verifi	Verification	Approval	Approval	
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date		ion C	Chief Eng	QC Inspector
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March 23, 2010 1:13:18 PM

Work Order ID: 57136

Parent Item:

D205-634-041

Parent Item Name: Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Qty: 1.00

Start Date: 23/03/2010

Required Date: 09/04/2010

Page 3

Required Qty: 1.00

D2855

Manufactured No

200

Each

139.0000 1.0000



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Warehouse		Loc Qty	Loc Code
Location			
Main Warehouse		- VV/03-3	
FP6		. 1	
56613	7)	1	
Main Warehouse			
ST026		138	
50513	- 1	1	
50770	/	1.	

Purchased

53791

51539

37 99 Each

1,365.000 2.0000



AN3-5A

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST350	1365	
100188	188	
105057	1177	

200

2 Bl 10-4-7.

Dart Aerospace Ltd

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W/O:			WC	ORK ORDER CHANG	ES			*	25 EW I
DATE STEP		PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No		PAR #:							
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NCR:		W	ORK ORD	ER NON-CONFORMA	NCE (NCR)			
DATE	STEP	Description of NC		Corrective Action Section	E. C.	Verific	ation	Approval	Approval
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March 23, 2010 1:13:18 PM

Work Order ID: 57136

Parent Item: Parent Item Name:

D205-634-041

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 23/03/2010

Start Qty: 1.00

Required Date: 09/04/2010

Page 4

Required Qty: 1.00

AN960JD10L

Purchased

200

Each

3,009.000 2.0000



Washer

Warehouse	Loc Oty	Loc Code
Location		
Main Warehouse		
ST348	3009	
101291	16	
105793	49	
110985	2944	

ALS7-1032-130

Purchased

200

Each

986.0000 50.0000



Insert

Warehouse	Loc Oty	Loc Code
Location		
Main Warehouse		
ST282	986	
108606	52	
111529	130	
111779	34	
112772	11	
113238	759	

50. St 10-4-7.

2 /10-4-7

Dart Aerospace Ltd	Dart	Aeros	pace	Ltd
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W/O:			W	ORK ORDER CHANGE	S				
DATE	STEP	PROC	EDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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		40 *							
Part No	:	PAR #:	Fault Cat	egory:	NCR: Ye	s No [DQA:	_ Date: _	
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DATE	CTED	Description of NC		Corrective Action Section		Ve	rification	Approval	Approval
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March 23, 2010 1:13:18 PM

Work Order ID: 57136

Parent Item: Parent Item Name:

D205-634-041

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

114103

114108

Start Date: 23/03/2010

Start Qty: 1.00

Required Date: 09/04/2010

Page 5

Required Qty: 1.00

AN3C4A Purchased

200

Each

1,183.000 50,0000



BOLT

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST350	1183	
112314	13	
112720	12	
112724	3	
112829	1	
112991	2	
113121 /	64	
113226	244	
113644	12	
113749	1	

AN960C10L

washer

Purchased

500 200 Each 0.0000

331

50:0000

NAS1149 CO332R 113524

50-pt 10-4-7.

Dart Aerospace Ltd

W/O:			W	ORK ORDER CHANG	ES		9	1.00
DATE	STEP	PRO	CEDURE CHA	NGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQA:	Date: _	
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NCR:		V	WORK ORD	ER NON-CONFORMA	ANCE (NCR)		
DATE	STEP	Description of NC		The state of the s	ion B	Verification	Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
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Work Order ID: 57136

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Qty: 1.00

Start Date: 23/03/2010

Required Date: 09/04/2010

1 1810-4-7

Required Oty: 1.00

D3566-13

Manufactured

200

Each

1.0000 65.0000



Gasket

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP	65	
45717	1	
50265	Į I	
53461	63	

D3566-5

Gasket

Manufactured

FP015

200

Each

27,0000 1.0000

Warehouse Loc Oty Loc Code Location Main Warehouse FP 36113 46186 51260

56829 Main Warehouse FP19 55335 V

Main Warehouse 13 13

11

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W/O:			WC	RK ORDER CHANG	ES		•	
DATE STEP		PROCEDURE CHANGE By		Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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Part No		PAR #:						
	Hes	solution:					Date: _	
NCR:		V	VORK ORDI	ER NON-CONFORM	ANCE (NCR)			
DATE	STEP	Description of NC			ion B	Verification	Approval	Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
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March 23, 2010 1:13:18 PM

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Work Order ID: 57136

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 23/03/2010

Required Date: 09/04/2010

Start Qty: 1.00

Required Qty: 1.00

D3566-1

Manufactured

Manufactured

200

Each

41,0000 2,0000



Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP	19	
46349	1	
51218	1	
51259	3	
52512	3	
54480	1	
55011	1	
56532	9	

Main Warehouse

FP015 56825 v

200

22 22

Each

5.0000 1.0000

D3564-11



Wearshoe

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP	5	
45823	1	
50112	1	
56834	3	

1 1 10-4-7.

Dart Aerospa	ce l	_td
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	life.							*
W/O:			WC	ORK ORDER CHANGI	ES		•	G(#)
DATE	STEP	PROC	EDURE CHA	NGE	Ву	Date Q	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		2						
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQA: _	Date: _	
	R	esolution:	Dispositio	n:	QA: N/C Cld	osed:	Date: _	
NCR:		W	ORK ORD	ER NON-CONFORMA	NCE (NCR)		
DATE	STEP	Description of NC		Corrective Action Section		Verificatio	n Approval	Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector

March 23, 2010 1:13:18 PM

Work Order ID: 57136

Parent Item:

D205-634-041

Parent Item Name: Replacement Skidtube

Comments:

IPP Rev:N □ 02.08.28 □ FP was QC5 in Step 27; Added QC5 to Step 30 □ KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 23/03/2010

Start Qty: 1.00

Required Date: 09/04/2010

Required Qty: 1.00

Page 8

D3564-13

Manufactured

200

Each

44.0000

1.0000



Wearshoe

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP	26	
45409	2	
46495 /	10	
46495 56285 ✓	14	
Main Warehouse		
FP17	18	
56533	18	

D3564-9

Wearshoe

Manufactured

200

Each

12.0000 1.0000



Warehouse Loc Qty Loc Code Location Main Warehouse FP 12 44659 55334

1 \$ 10-4-7

Dart	Aerospace	Ltd

W/O:			٧	VORK ORDER CHANGES	3				
DATE	STEP	PROC	EDURE CH	HANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								,	
Part No	:	PAR #:	Fault Ca	tegory:	NCR: Yes	No DQ	A:	_ Date: _	
		esolution:							
NCR:		Wo	ORK OR	DER NON-CONFORMAN	CE (NCR)			1
DATE	STEP	Description of NC		Corrective Action Section I		Verific	ation	Approval	Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti		Chief Eng	QC Inspector
									- ;
									9
			-1						

March 23, 2010 1:13:18 PM

Page 9

Work Order ID: 57136

Parent Item:

Parent Item Name:

D205-634-041

Comments:

Replacement Skidtube

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets

Start Date: 23/03/2010

Start Qty: 1.00

Required Date: 09/04/2010

Required Qty: 1.00

D3564-5

Manufactured

200

Each

26.0000

1.0000

Wearshoe

Warehouse	Loc Oty	Loc Code
Location		
OFFSHORE		
FG	2	
34806	2	
Main Warehouse		
FP	24	
45824 /	1	
55024	11	

D2594-3

O-Ring, 205 Skidtube

Manufactured

55333

12 Each

412.0000 16.0000

Warehouse Loc Qty Loc Code Location Main Warehouse FP 412 51613 27 52562 13 55546 V 372

200

16 ff 10-4-7.

Dart Ae	rospace	Ltd								
W/O:		WORK ORDER CHANGES								(1. 10 .0)
DATE	STEP	PRO	OCEDURE CHA	INGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	gory:	NCR:	Yes	No DQA:		Date:	
	Re	solution:	Dispositio	QA: N/C Closed: Date:						
NCR:		1	WORK ORD	ER NON-CONFORMA	NCE	NCR)			
		Description of NC	Corrective Action Section				Verifica	tion	Approval	Annroyal
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	n Sign 8 Date		Section		Approval Chief Eng	Approval QC Inspector

March 23, 2010 1:13:18 PM

Page 10

Work Order ID: 57136

Parent Item:

D205-634-041

Parent Item Name: Comments:

Replacement Skidtube

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 23/03/2010

Start Qty: 1.00

Required Date: 09/04/2010

Required Qty: 1.00

D2594-1

Manufactured

200

Each

513.0000 16.0000



Plug, 205 Skidtube

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP	513	
42221	16	
42807	92	
43884	3	
46435	2	
51527	2 9	
51757	6	
54008	1	
54643	15	
55002	369	

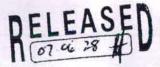
16. fl 10-4-7.

Dart Aerospace Ltd

W/O:			W	ORK ORDER CHANG	ES				•2	S#27	
DATE	STEP	PROCEDURE CHANGE				Ву	Date	Approval QC Inspector			
Part No	:	PAR #:	Fault Cat	egory:	NCR	: Yes N	o DQ	A:	_ Date: _		
Resolution:			Dispositi	Disposition: QA: N/C Closed:					Date:		
NCR:			WORK ORE	ER NON-CONFORMA	ANCE	(NCR)	Y				
DATE	STEP	Description of NC	Corrective Action Section B			Verificat			Approval	Approval	
DAIL	JILI	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	& Section C Chief Er			QC Inspector	
C											
1	1						1				



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. REV. D2580 SHEET 1 OF	40 04
DATE	1 /3	TITLE SCA	LE
07.02.27	7	205 SKIDTUBE ASSEMBLY	ITS
A	96.09.16	NEW ISSUE	
В	96.12.02	AS MANUFACTURED	
С	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	



QTY -041	QTY -045	Part Number	Description				
X		D2580-041	SKIDTUBE ASSEMBLY				
	Х	D2580-045	SKIDTUBE ASSEMBLY				
1	1	D2500-1-190	EXTRUSION				
1	1	D2576-3	STEP				
20	24	D2579	CROSS BOLT SPACER				
16	16	D2594-1	PLUG				
16	16	D2594-3	O-RING				
1	1	D2596	205 WEB				
1	1	D2855	AFT CAP				
1	1	D3564-5	WEARSHOE				
1	1	D3564-9	WEARSHOE				
1	1	D3564-11	WEARSHOE				
1	1	D3564-13	WEARSHOE				
2	2	D3566-1	GASKET				
1	1	D3566-5	GASKET				
1	1	D3566-13	GASKET				
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT				
50	50	AN3C4A	BOLT				
2	2	AN3-5A	BOLT				
50	50	AN960C10L	WASHER				
2	2	AN960JD10L	WASHER				

SHOP COPY
RETURN (6)
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UNCONTROLLED COPY
SUBJECT TO AMERICANENT
WITHOUT NOTICE
WORK ORDER
NO. 57/3 (

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:

SEE NOTES ON

PAGE 2 FOR D2580-041 AND

PAGE 3 FOR D2580-045

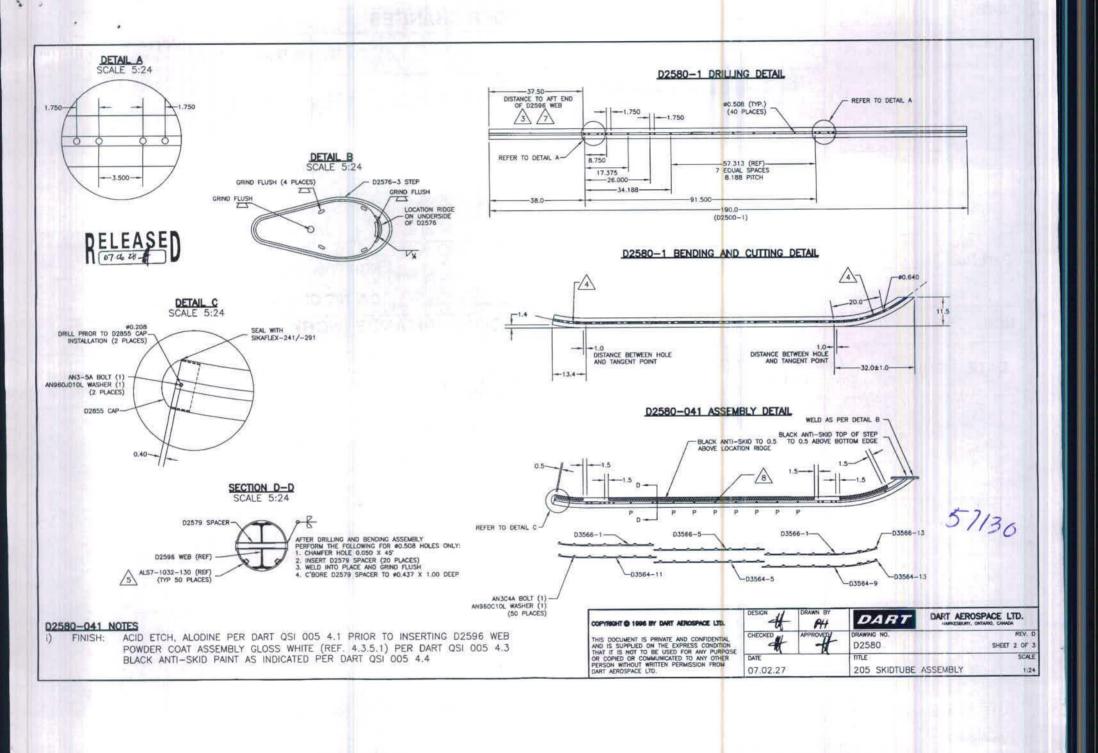
 INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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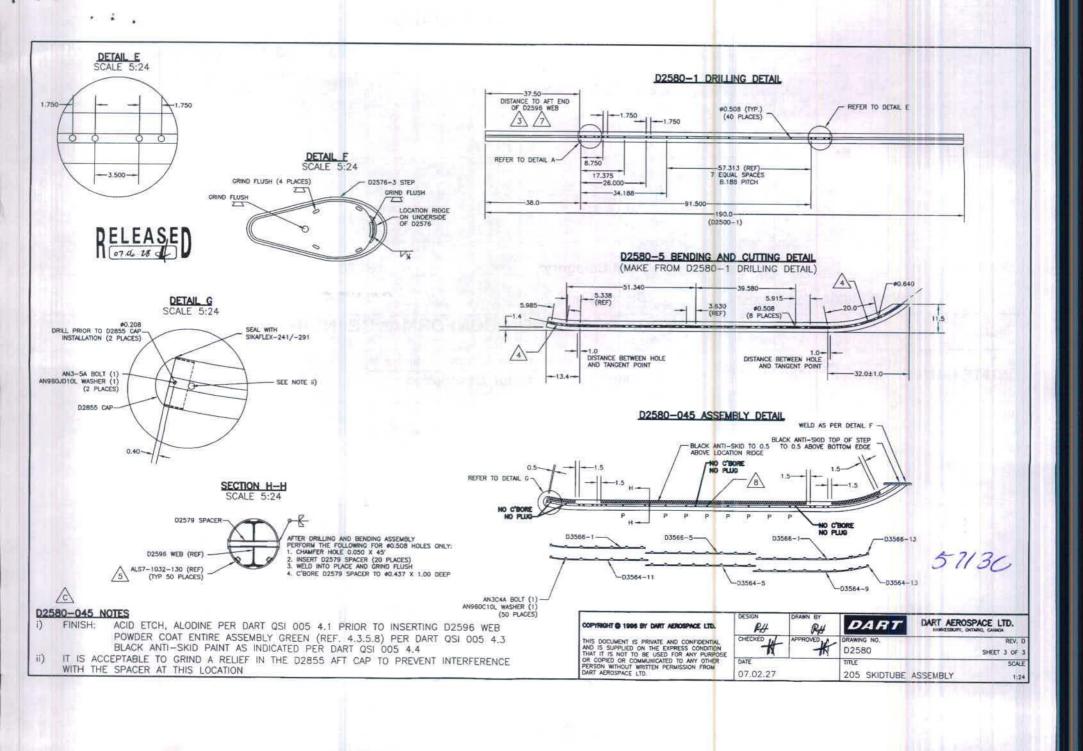
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Dart Aerospace Ltd

W/O:			WC	ORK ORDER CHANGI	S				
DATE	STEP	PROC	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
Part No		PAR #:					Date:		
	Re	esolution:	Disposition	n:	QA: N/C CI	osed:		Date:	
NCR:		W	ORK ORD	ER NON-CONFORMA	NCE (NCR	1)			
DATE	STEP	Description of NC Section A Initial Action Description Sign &	Verific	Verification Appro		al Approval			
	0.2.	Section A	Initial Chief Eng	Action Description Chief Eng	Date	Section	on C		QC Inspector
	1								
				i.					



DATE S	STEP									•
	-	PROC	PROCEDURE CHANGE					Qty	Approval Chief Eng / Prod Mgr	
		1 k - ;		=						
Part No:		PAR #:	_ Fault Cate	gory:	NC	R: Yes	No DQA:		_ Date: _	
	Reso	lution:	Disposition	n:	QA	: N/C CI	osed:		_ Date: _	
NCR:		W	ORK ORDE	R NON-CONFOR	RMANCE	(NCF)			
DATE	0750	Description of NC		Corrective Action	Section B		Verificat	tion	Approval	Annau
DATE S	STEP	Section A	Initial Chief Eng	Action Descripti Chief Eng	on	Sign & Date	Verification Section C		Chief Eng	QC Inspect



Dart Aerospace Ltd

W/O:			W	ORK ORDER CHAN	IGES		Million .	
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No		PAR #:	Fault Cat	egory:	NCR: Yes	No DQA:	Date: _	
	Re	esolution:	Dispositi	on:	QA: N/C	Closed:	Date:	
NCR:	THE OWNER	V Service V	VORK ORI	DER NON-CONFORM	MANCE (NO	(R)		
DATE	STEP	Description of NC		Section of the Control of the Contro	ection B	Verifica	tion Approval	Approval
DATE	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	n Sign Dat	& Section		QC Inspector
			O. S.	<u> </u>				

NO. 227

AWS D17.1.2001 QUALIFICATION TEST RECORD

Name: Barday Elliott

Job number: 56925

Part number: D205-634-041

Description: 205 3kid tube

Welding Process: Tig[Mig[]

Base materiel: Aluminum

Current: AC[DC[]

TEST REQUIREMENTS AND RESULTS

Visual:	pass[]	fail[]
Penetration:	pass[/]	fail[]
UNACCEPTABLE		
Cracks:	pass[/]	fail[]
Undercut:	pass[1]	fail[]
Pin holes:	pass[/]	fail[]
Overlap (cold lap)	pass[]	fail[]
Porosity (surface):	pass[/]	fail[]
Coloration:	pass[]	fail[]
20-1 Alexandra		*
Qualifier Fed San	Date of Te	est Coupon 10.03.19
Welder Barley Elket	est Coupon_/6-63-/9	

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

